ANNUAL WATER QUALITY REPORT

Reporting Year 2024

Presented By
Milford Water Utilities

PWS ID#: 1561010

Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your source of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Where Does My Water Come From?

The Town of Milford's water supply consists of three gravel-packed wells known as the Curtis Wells, located in the southwestern part of the Town of Amherst. Milford also has an intermunicipal connection with the Pennichuck Water distribution system. During 2024 we provided a total of 316,191,228 gallons to the Town of Milford. The Curtis Wells supplied 93.87 percent of the water needed; 6.13 percent was purchased from Pennichuck.

The water is chemically adjusted with sodium hydroxide to maintain a neutral pH, and calcium hypochlorite is added to control bacteria. To control the leaching of lead and copper and for corrosion control of trace metals, zinc orthophosphate is added.

Benefits of Chlorination

Disinfection, a chemical process used to control disease-causing microorganisms by killing or inactivating them, is unquestionably the most important step in drinking water treatment. By far, the most common method of disinfection in North America is chlorination.

Before communities began routinely treating drinking water with chlorine (starting with Chicago and Jersey City in 1908), cholera, typhoid fever, dysentery, and hepatitis A killed thousands of U.S. residents annually. Drinking water chlorination and filtration have helped to virtually eliminate these diseases in the U.S. Significant strides in public health are directly linked to the adoption of drinking water chlorination. In fact, the filtration of drinking water and the use of chlorine are probably the most significant public health advancements in human history.

How chlorination works:

- Potent Germicide: Reduction of many disease-causing microorganisms in drinking water to almost immeasurable levels.
- Taste and Odor: Reduction of many disagreeable tastes and odors from foul-smelling algae secretions, sulfides, and decaying vegetation.
- Biological Growth: Elimination of slime bacteria, molds, and algae that commonly grow in water supply reservoirs, on the walls of water mains, and in storage tanks.
- Chemical: Removal of hydrogen sulfide (which has a rotten egg odor), ammonia, and other nitrogenous compounds that have unpleasant tastes and hinder disinfection. It also helps to remove iron and manganese from raw water.

Source Water Assessment

The New Hampshire Department of Environmental Services (NHDES) prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources, and a summary of available protection options. The results of the assessment, prepared in 2001, are as follows.

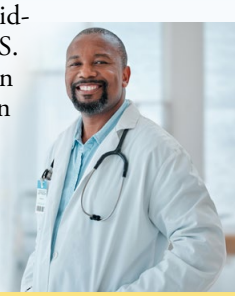
Curtis Wells 1 and 2: four susceptibility factors were rated high, three were rated medium, and five were rated low.

This assessment is over 20 years old and includes information that was current at the time the report was completed. Some of the ratings might be different if updated to reflect current information. At the present time, NHDES has no plans to update this data.

The complete Source Water Assessment Report is available for review at the Water Utilities Department, 564 Nashua Street, Milford. For more information, call (603) 249-0660 or visit des.nh.gov. To access the Source Water Assessment from Pennichuck, please review their 2024 CCR at https://pennichuck.com/water-quality/consumer-confidence-reports/.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791) or epa.gov/safewater.



Questions?

For more information about this report, or for any questions relating to your drinking water, please call Jim Pouliot, Director of Water Utilities, at (603) 249-0661.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, in some cases radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including per- and polyfluoroalkyl substances, synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Table Talk

Get the most out of the Testing Results data table with this simple suggestion. In less than a minute, you will know all there is to know about your water:

> For each substance listed, compare the value in the Amount Detected column against the value in the MCL (or AL, SMCL) column. If the Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

Other Table Information Worth Noting

Verify that there were no violations of the state and/or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report.

If there is an ND or a less-than symbol (<), that means that the substance was not detected (i.e., below the detectable limits of the testing equipment).

The Range column displays the lowest and highest sample readings. If there is an NA showing, that means only a single sample was taken to test for the substance (assuming there is a reported value in the Amount Detected column).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. The Water and Sewer Commission meets every two weeks at 11:00 a.m. at the Milford Water Utilities Department meeting room.

Lead in Home Plumbing

Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Milford Water Utilities is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter certified by an American National Standards Institute-accredited certifier to reduce lead is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure it is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling does not remove lead from water.

Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, or doing laundry or a load of dishes. If you have a lead or galvanized service line requiring replacement, you may need to flush your pipes for a longer period. If you are concerned about lead and wish to have your water tested, contact us at (603) 249-0661. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The lead service inventory may be obtained at the Milford Water Utilities office. Please contact us at (603) 249-0661 if you would like more information about the inventory or any lead sampling that has been done.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

We participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. None of these substances were observed above laboratory detection limits in our water.

UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact us at (603) 249-0661 if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

				Milford Water Utilities		Source 504 [2]		Source 509 [3]			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2022	2	2	NA	NA	0.026	NA	0.018[1]	NA	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine (ppm)	2024	[4]	[4]	0.66	NA	NA	NA	NA	NA	No	Water additive used to control microbes
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	0.018	0.015–0.018	NA	NA	NA	NA	No	By-product of drinking water disinfection
Nitrate (ppm)	2024	10	10	NA	NA	0.34	NA	0.35	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Perfluorohexanesulfonic Acid [PFHxS] (ppt)	2024	18	0	NA	NA	1.14	NA	1.03	NA	No	Discharge from industrial processes; wastewater treatment; residuals from firefighting foam; runoff/leachate from landfills and septic systems
Perfluorononanoic Acid [PFNA] (ppt)	2024	11	0	NA	NA	<2.00	NA	<2.00	NA	No	Discharge from industrial processes; wastewater treatment; residuals from firefighting foam; runoff/leachate from landfills and septic systems
Perfluorooctanesulfonic Acid [PFOS] (ppt)	2024	15	0	NA	NA	2.03	NA	2.01	NA	No	Discharge from industrial processes; wastewater treatment; residuals from firefighting foam; runoff/leachate from landfills and septic systems
Perfluorooctanoic Acid [PFOA] (ppt)	2024	12	0	NA	NA	3.90	NA	3.86	NA	No	Discharge from industrial processes; wastewater treatment; residuals from firefighting foam; runoff/leachate from landfills and septic systems
Selenium (ppb)	2022	50	50	NA	NA	4	NA	<0.001[1]	NA	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	0.034	0.033–0.034	NA	NA	NA	NA	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2024	1.3	1.3	0.38	0.10–0.47	0/23	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2024	15	0	2.08	<1–2.5	0/23	No	Corrosion of household plumbing systems; erosion of natural deposits

SECONDARY SUBSTANCES											
				Milford Water Utilities		Source 504 [2]		Source 509 [3]			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2022	250	NA	NA	NA	58.1	NA	43.0[1]	NA	No	Runoff/leaching from natural deposits
Iron (ppb)	2022	300	NA	NA	NA	218	NA	0.074[1]	NA	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2022	50	NA	NA	NA	127	NA	0.098[1]	NA	No	Leaching from natural deposits
pH (ppm)	2022	6.5-8.5	NA	NA	NA	7.29	NA	6.80[1]	NA	No	Naturally occurring
Sodium (ppm)	2022	100-250	NA	NA	NA	36.3	NA	45.0[1]	NA	No	Naturally occurring
Sulfate (ppm)	2022	250	NA	NA	NA	7.38	NA	6.60[1]	NA	No	Runoff/leaching from natural deposits; industrial wastes
Zinc (ppm)	2022	5	NA	NA	NA	0.123	NA	0.160[1]	NA	No	Runoff/leaching from natural deposits; industrial wastes

[1] Sampled in 2023. [2] Well 1 + Well 2 [3] Well 1 + Well 2A

Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through them.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen and disinfectant levels and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use, and avoid using hot water to prevent sediment accumulation in your hot water tank. Please contact us at (603) 249-0661 if you have any questions or if you would like more information on our water main flushing schedule.

About Our Monitoring Violation

During summer 2024, we did not test for lead and copper in the public drinking water system. Upon being notified of this violation by the U.S. EPA, we immediately analyzed our water supply for lead and copper. Results of the analysis have been received and properly recorded as required by state and federal law. We do not believe that missing this monitoring requirement had any impact on public health and safety. We have already taken the steps to ensure that adequate monitoring and reporting will be performed in the future so that this oversight will not be repeated.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (mg/L) (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (ng/L) (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.